IN THE CLAIMS

1. (Currently Amended) A broadband Internet Protocol (IP) based network, comprising:

at least one customer coupled to the network via a broadband multi service proxy server (BMPS) including a database and a router;

means for registering the at least one customer with a selected Internet Service Provider (ISP) for all IP services, prior to receiving the services;

means responsive to the **ISP** registration for storing in the database a customer identification, ID and password **generated by the ISP**;

means for mapping a unique customer address to the DHCP request.

means for generating a DHCP message including an extended portion identifying the selected ISP in a customer request for all IP services with the selected Internet Services Provider (ISP);

means for receiving and routing the customer request and extended DHCP request to the selected ISP for providing all IP services to the customer after updating routing tables in the router **by the ISP**;

means for directing future customer request for **and responses from** all IP services directly to the selected ISP **or any internet service** based on the updated routing tables ~~thereby bypassing standard internet DHCP protocol~~[.]; and

2. (Currently Amended) The broadband network of Claim1 further comprising:

modem means for coupling the customer to the network; and

means for generating ~~a~~ **the** unique customer address as part of the DHCP request.

3. (Previously Amended) The broadband network of Claim 1 further comprising:

means for storing customer address information in the database.

4. Canceled without prejudice

5. (Original Claim) The broadband network of Claim 1 further comprising:

routing means coupled to the BMPS for serving a plurality of ISPs.

6. (Currently Amended) A broadband multi service proxy server, comprising:

means coupling the server via a router to a broadband IP based network serving a plurality of customers;

means coupling the server and the router to an IP network via at least one Internet Service Providers (ISP) in a plurality of ISPs;

means for generating a customer request including an extended DHCP message for access to the IP network, the extended DHCP message including an identification of a selected ISP for all ISP services;

means for mapping a unique customer address to the DHCP request.

means enabling the customer to access the selected ISP of choice for IP network services; and

means for directing future customer requests for **and responses from** IP services directly to the selected ISP **or any selected internet service** after updating routing tables in the router ~~thereby bypassing standard Internet DHCP protocol~~.

7. (Currently Amended) The server of Claim 6 further comprising:

means for ~~generating a unique address for a customer and~~ storing the **unique** address in the server as an origination source for a customer request.

8. (Previously Amended) The server of Claim 6 further comprising:

means for pre- registering a customer for IP service with an ISP prior to generating a customer request; and

means for sending the server a customer ID and password for customers registered by the ISP.

9. (Original Claim) The server of Claim 6 further comprising:

means for sending a DHCP and unique customer address in a customer request for access to the IP network;

means for receiving the customer request and storing the unique customer address in a database coupled to the server.

10. (Original Claim) The server of Claim 6 further comprising:

means for sending the server an extended DHCP response and customer assigned address for customer requests validated by the ISP.

11. (Currently Amended) The server of Claim 6 further comprising:

means for mapping validated customer requests to ~~a~~ **the** unique customer address; and

means emulating the ISP and sending the customer a DHCP response to the customer request.

12. (Previously Amended) The server of Claim 6 further comprising:

means for validating a customer request for access to the IP network at the ISP of customer choice.

13. (Currently Amended) In a broadband IP based network including server means coupled to the network and to a plurality of ISPs via a switching means, a method of providing IP services to network customers via an ISP of their choice, comprising the steps of:

registering a customer for IP services from a selected Internet service provider (ISP);

generating a request by the customer including a DHCP message for IP services from the selected ISP;

mapping a unique customer address to the DHCP request.

sending the request and DHCP message to the server for processing to determine if the customer is approved by the network for receiving IP services;

sending the request and an extended DHCP message for IP service to the selected ISP for all ISP services;

returning the extended DHCP message to the server and updating tables in the switching means to provide the customer with IP services directly from the selected ISP; and

directing future customer requests for **and responses from** IP services directly to the selected ISP **or selected internet service** ~~thereby bypassing standard Internet DHCP protocol~~ .

14. Canceled without prejudice.

15. (Previously Amended) The method of Claim 13 further comprising the step of:

emulating the ISP by the server means and sending a DHCP reply to the customer followed by updating the switching means to allow the customer to access the ISP of choice.

16. (Original Claim)The method of Claim 13 further comprising the step of:

checking the extended DHCP message by the ISP to determine if the customer is approved to receive IP services.

17. (Original Claim)The method of Claim 13 further comprising the step of:

notifying the server when the ISP determines the customer is not approved to receive IP services.

18. (Original Claim)The method of Claim 13 further comprising the step of:

sending the server a customer ID and password for customers registered by the ISP.

19. (Original Claim)The method of Claim 13 further comprising the step of:

sending the server an extended DHCP response and customer assigned address for customer requests validated by the ISP.

20. (Original Claim) The method of Claim 4 **3** wherein the unique customer address is a MAC address.